



ELSEVIER

Volume 438 issues 1–2, 3 July 2001

**ANALYTICA  
CHIMICA  
ACTA**

[www.elsevier.com/locate/aca](http://www.elsevier.com/locate/aca)

## CONTENTS

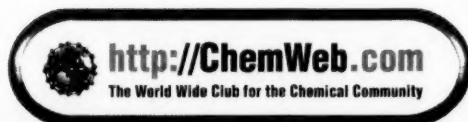
(Full texts are incorporated in CJELSEVIER, a file in the Chemical Journals Online database available on STN International; Abstracted, indexed in: Aluminium Abstracts; Anal. Abstr.; Biol. Abstr.; BIOSIS; Chem. Abstr.; Curr. Contents Phys. Chem. Earth Sci.; Engineered Materials Abstracts; Excerpta Medica; Index Med.; Life Sci.; Mass Spectrum. Bull.; Material Business Alerts; Metals Abstracts; Sci. Citation Index)

### Special Issue

Papers presented at the 8<sup>th</sup> International Conference on Flow Analysis, Warsaw, Poland, 25–29 June 2000

<b>Foreword</b> .....	1
<b>UV/Visible spectrophotometry</b>	
Exploitation of tandem streams for carry-over compensation in flow analysis. I. Turbidimetric determination of potassium in fertilizers S. Vicente, E.P. Borges, B.F. Reis and E.A.G. Zagatto (Piracicaba, Brazil) .....	3
An improved flow system for spectrophotometric determination of anions exploiting multicommutation and multidetection F.R.P. Rocha, P.B. Martelli and B.F. Reis (Piracicaba, Brazil) .....	11
Simultaneous flow injection determination of ascorbic acid and cysteine using double flow cell N. Teshima, T. Nobuta and T. Sakai (Toyota, Japan) .....	21
Sequential injection analysis of captopril based on colorimetric and potentiometric detection A.M. Pimenta, A.N. Araújo and M.C.B.S.M. Montenegro (Porto, Portugal) .....	31
Sequential injection analysis as a tool for in situ monitoring of Fe(II), Fe(III), NO <sub>3</sub> <sup>-</sup> and NO <sub>2</sub> <sup>-</sup> in natural and waste waters C.X. Galhardo and J.C. Masini (São Paulo, Brazil) .....	39
Gas-segmented continuous flow analysis of iron in water with a long liquid waveguide capillary flow cell J.-Z. Zhang, C. Kelble and F.J. Millero (Miami, FL, USA) .....	49
Multicommutation flow system for spectrophotometric L(+)lactate determination in silage material using an enzymatic reaction C.A. Tumang, E.P. Borges (São Carlos, Brazil) and B.F. Reis (Piracicaba, Brazil) .....	59
Monosegmented flow titrator E.V. de Aquino, J.J.R. Rohwedder and C. Pasquini (Campinas, Brazil) .....	67

(Continued overleaf)



<http://chemweb.com/gateways/elsevier.html>

**CONTENTS  
Direct**

This journal is part of **ContentsDirect**, the **free** alerting service which sends tables of contents by e-mail for Elsevier Science books and journals. You can register for **ContentsDirect** online at: [www.elsevier.nl/locate/contentsdirect](http://www.elsevier.nl/locate/contentsdirect)

Turbidimetric determination of sulphate employing gravity flow-based systems J.A. Vieira, I.M. Raimundo Jr. (Campinas, Brazil) and B.F. Reis (Piracicaba, Brazil) .....	75
Spectrophotometric flow-injection analysis of the total base number in lubricants by using acid-base buffers K. Jyonosono, T. Imato (Fukuoka, Japan), N. Imazumi, M. Nakanishi and J.-i. Yagi (Chiba, Japan) .....	83
Spectrophotometric determination of nalidixic and pipemidic acids in a flow injection assembly with a solid-phase reactor as a highly stable reagent source Y. Fuster Mestre, L. Lahuerta Zamora (Moncada, Spain) and J. Martínez Calatayud (Burjassot, Spain) .....	93
Dual wetting-film multi-syringe flow injection analysis extraction. Application to the simultaneous determination of nitrophenols M. Miró, A. Cladera, J.M. Estela and V. Cerdà (Palma de Mallorca, Spain) .....	103
<b>Fluorescence</b>	
Extraction-flow injection spectrofluorimetric measurement of dissolved oxygen in environmental waters using 2-thionaphthol T. Sakai, H. Takio, N. Teshima (Toyota, Japan) and H. Nishikawa (Gifu, Japan) .....	117
Automated kinetics-enhanced flow-injection method for histamine in regulatory laboratories: rapid screening and suitability requirements J.M. Hungerford, T.A. Hollingworth and M.M. Wekell (Bothell, WA, USA) .....	123
Automated flow injection fluorimetric determination and dissolution studies of bumetanide in pharmaceuticals P. Solich (Hradec Kralove, Czech Republic), C.K. Polydorou, M.A. Koupparis and C.E. Efstathiou (Athens, Greece) .....	131
<b>Chemiluminescence</b>	
Flow-injection chemiluminometric assay of superoxide dismutase H. Ukeda, A.K. Sarker, D. Kawana and M. Sawamura (Nankoku, Japan) .....	137
Determination of humic acid in natural waters by flow injection analysis with chemiluminescence detection J. Michałowski, P. Hałaburda and A. Kojło (Białystok, Poland) .....	143
Flow-injection analysis study of the chemiluminescent behaviour of proflavine and acriflavine O. Rubio Pons, D. Martínez Gregorio (Burjassot, Spain), J.V. García Mateo (Moncada, Spain) and J. Martínez Calatayud (Burjassot, Spain) .....	149
Determination of the flavor enhancer maltol through a FIA — direct chemiluminescence procedure M.C. Sanfeliu Alonso, L. Lahuerta Zamora (Moncada, Spain) and J. Martínez Calatayud (Burjassot, Spain) .....	157
Determination of some sulphonamides by sequential injection analysis with chemiluminescence detection H. Paseková, M. Polášek (Kralove, Czech Republic), J.F. Cigarro (Porto, Portugal) and J. Dolejšová (Kralove, Czech Republic) .....	165
<b>Infrared</b>	
Mid-infrared spectroscopy coupled to sequential injection analysis for the on-line monitoring of the acetone-butanol fermentation process M. Kansiz (Vienna, Austria and Melbourne, Australia), J.R. Gapes (Vienna, Austria), D. McNaughton (Melbourne, Australia), B. Lendl and K.C. Schuster (Vienna, Austria) .....	175
<b>Atomic spectrometry</b>	
Examination of interferences in flame atomic absorption spectrometry using a flow injection technique P. Kościelniak and M. Kozak (Kraków, Poland) .....	187
Determination of various arsenic species by flow injection hydride generation atomic absorption spectrometry: investigation of the effects of the acid concentration of different reaction media on the generation of arsines P. Carrero, A. Malavé, J.L. Burguera, M. Burguera and C. Rondón (Mérida, Venezuela) .....	195
Determination of trace metals in seawater by on-line column preconcentration inductively coupled plasma mass spectrometry S. Hirata (Hiroshima, Japan), Y. Ishida, M. Aihara (Higashi-Hiroshima, Japan), K. Honda and O. Shikino (Osaka, Japan) ....	205
Comparison of the performance of FI-ICP-MS and FI-ETV-ICP-MS systems for the determination of trace elements in sea water D. Pozebon (Porto Alegre, Brazil), V.L. Dressler (Santa Maria, Brazil) and A.J. Curtius (Florianópolis, Brazil) .....	215
Determination of Fe(III) and total Fe in wines by sequential injection analysis and flame atomic absorption spectrometry R.C. de Campos Costa and A.N. Araújo (Porto, Portugal) .....	227
Determination of Ag, Te, U and Au in waters and in biological samples by FI-ICP-MS following on-line preconcentration V.L. Dressler (Santa Maria, Brazil), D. Pozebon (Porto Alegre, Brazil) and A.J. Curtius (Florianópolis, Brazil) .....	235
On-line determination of total mercury in the Baltic Sea O. Wurl, O. Elsholz (Hamburg, Germany) and R. Ebinghaus (Geesthacht, Germany) .....	245
Sequential injection standard addition for on-line measurement of mercury in the river Elbe O. Elsholz, C. Frank, B. Stachel, H. Reincke (Hamburg, Germany) and R. Ebinghaus (Geesthacht, Germany) .....	251
Flow injection system for cadmium preconcentration on poly(octadecyl diitaconate) (PDI-18) and atomic absorption spectrometry detection Y. Petit De Peña, W. López, M. Burguera, J.L. Burguera, López-Carrasquero and M. Carrillo (Mérida, Venezuela) .....	259

Micro flow system to perform programmable isotope dilution for inductively coupled plasma-mass spectrometry A.P. Packer, M.F. Giné, B.F. dos Reis and A.A. Menegário (Piracicaba, Brazil) .....	267
<b>Electroanalytical</b>	
Determination of soil calcareous efficiency using flow system with pervaporative separation M.Y. Kamogawa, A.R.A. Nogueira (S. Carlos SP, Brazil), M. Miyazawa (Londrina, Brazil), J. Artigas and J. Alonso (Barcelona, Spain) .....	273
Selective flow-injection biamperometric determination of sulfur-containing amino acids and structurally related compounds M. Catalá Icardo, O. Armentah Estrela (Valencia, Spain), M. Sajewicz (Bialystok, Poland), J.V. García Mateo (Moncada, Spain) and J. Martínez Calatayud (Valencia, Spain) .....	281
Automatic flow titrator based on a multicommutated unsegmented flow system for alkalinity monitoring in wastewaters C.M.N.V. Almeida, R.A.S. Lapa and J.L.F.C. Lima (Porto, Portugal) .....	291
Flow injection amperometry for the determination of iodate in iodized table salt J. Jakmunee and K. Grudpan (Chiang Mai, Thailand) .....	299
Potentiometric flow injection system for the determination of polyethoxylate nonionic surfactants using tubular ion-selective electrodes S. Martínez-Barrachina, M. del Valle (Catalonia, Spain), L. Matia, R. Prats (Barcelona, Spain) and J. Alonso (Catalonia, Spain) .....	305
<b>Capillary electrophoresis</b>	
Analysis of solid samples by capillary electrophoresis using a gas extraction sampling device in a flow system A.G. Lista (Bahía Blanca, Argentina), L. Arce, A. Ríos and M. Valcárcel (Córdoba, Spain) .....	315
<b>Calibration</b>	
Univariate calibration techniques in flow injection analysis P. Kościelniak (Kraków, Poland) .....	323
Quantitative determinations in conventional flow injection analysis based on different chemometric calibration strategies: a review J. Saurina and S. Hernández-Cassou (Barcelona, Spain) .....	335
<b>Author Index</b> .....	353
<b>Calendar of forthcoming meetings</b> .....	N1